NOTE

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Section 22a-174-19a. Control of sulfur dioxide emissions from power plants and other large stationary sources of air pollution.

- (a) **Definitions.** For purposes of this section:
- (1) "Affected state" means "affected states" as defined in section 22a-174-1 of the Regulations of Connecticut State Agencies.
- (2) "Affected unit" means any emissions unit subject to the provisions of section 22a-174-22b of the Regulations of Connecticut State Agencies, the Post- 2002 Nitrogen Oxides Budget Program.
- (3) "Average emissions rate" means a determination of the rate of SO2 emissions, measured in pounds of SO2 per MMBtu, in any calendar quarter from either a single affected unit or from two or more affected units. Average emissions rate for a single unit is calculated by dividing the total quarterly SO2 emissions, in pounds, from such unit by the total quarterly heat input, in MMBtu, for such unit. Average emissions rate for two or more units is calculated by dividing the total quarterly SO2 emissions, in pounds, from all such units by the total quarterly heat input, in MMBtu, for all such units.
- (4) "Calendar quarter" means the period of January 1 to March 31, inclusive, April 1 to June 30, inclusive, July 1 to September 30, inclusive or October 1 to December 31, inclusive.
- (5) "Connecticut State SO2 Retirement Account" means a general allowance tracking system account established by the commissioner under 40 CFR 73.31 for the purpose of permanently holding SO2 allowances retired by the owners or operators of affected units in accordance with the provisions of subsection (d) of this section.
- (6) "Continuous emissions monitoring system" or "CEMS" means any equipment used to sample, analyze and measure SO2 emissions to provide a permanent record of such emissions expressed in pounds per MMBtu.
- (7) "Emissions unit" means "emission unit" as defined in section 22a-174-1 of the Regulations of Connecticut State Agencies.
- (8) "Early reduction credit" means a reduction of SO2 during calendar years 1999, 2000, 2001 or 2002 below the most stringent SO2 emission rate applicable to an affected unit pursuant to subsection (h)(5)(B) of this section.
- (9) "Generation period" means the period of time during which reductions in emissions of an air pollutant are implemented.
- (10) "MMBtu" means million BTU of heat input.
- (11) "Retire" or "retirement" when referring to SO2 allowances, means the permanent withdrawal of SO2 allowances by the Administrator from any allowance tracking system account

to the Connecticut SO2 Allowance Retirement Account in an amount equal to the number of tons of SO2 emitted by each affected unit.

- (12) "Sulfur dioxide" or "SO2" means a gas that at standard conditions has the molecular form SO2.
- (13) "Sulfur dioxide Discrete Emission Reduction Credit" or "SO2 DERC" means the reduction of one ton of sulfur dioxide at a stationary source during the generation period, which the commissioner has certified in writing as real, quantifiable, surplus, permanent, and enforceable. Early reduction credits shall qualify as SO2 DERCs.
- (14) "Title IV SO2 allowance" or "SO2 allowance" means an authorization allocated to a Title IV source by the Administrator, pursuant to Title IV of the federal Clean Air Act (42 USC 7651d, et seq.) and 40 CFR Parts 72 and 73, to emit up to one ton of SO2 during or after a specified calendar year.
- (15) "Title IV source" means an affected unit that is also subject to Phase II of the acid rain control requirements set forth in Title IV of the federal Clean Air Act (42 USC 7651d, et seq.).
- **(b)** Applicability. This section shall apply to the owner or operator of any affected unit.
- (c) Sulfur dioxide emission standards and fuel sulfur limits effective on and after January 1, 2002. On and after January 1, 2002 and except as provided in subsection (f) of this section, the owner or operator of an affected unit or units shall:
- (1) Combust liquid fuel, gaseous fuel or a combination of each provided that each fuel possess a fuel sulfur limit of equal to or less than 0.5 % sulfur, by weight (dry basis);
- (2) Meet an average emission rate of equal to or less than 0.55 pounds SO2 per MMBtu for each calendar quarter for an affected unit at the premises; or
- (3) Meet an average emission rate of equal to or less than 0.5 pounds SO2 per MMBtu calculated for each calendar quarter, if such owner or operator averages the emissions from two or more affected units at the premises.

(d) Additional Emission Reduction Requirements.

- (1) No later than the following March 1, for each calendar year commencing January 1, 2002, the owner or operator of each affected unit that is also a Title IV source shall retire one SO2 allowance, rounded up to the next whole ton, for each ton of SO2 emitted in the state of Connecticut. This requirement is in addition to any other requirements imposed on the owner or operator of a Title IV source by the Administrator under 40 CFR Parts 72 and 73.
- (2) The owner or operator of an affected unit shall retire the necessary amount of SO2 allowances by requesting that the Administrator transfer such allowances to the Connecticut State SO2 Retirement Account established by the commissioner pursuant to 40 CFR 73.31 and

administered by the federal Environmental Protection Agency under the provisions of 40 CFR Parts 72 and 73. The transfer of SO2 allowances in accordance with the provisions of this subdivision shall occur by March 1 for emissions occurring in the previous calendar year.

- (3) Any SO2 allowance retired in accordance with the provisions of this subsection shall be an allowance originally issued by the Administrator to a Title IV source located in the state of Connecticut or in any affected state.
- (e) Sulfur dioxide emission standards and fuel sulfur limits effective on and after January 1, 2003. Notwithstanding the provisions of subsection (b) of this section and except as provided in subsection (f) of this section, this subsection shall apply, on and after January 1, 2003, to the owner or operator of a Title IV source that is also an affected unit or units. On and after January 1, 2003, such owner or operator shall:
- (1) Combust liquid fuel, gaseous fuel or a combination of each provided that each fuel possess a fuel sulfur limit of equal to or less than 0.3 % sulfur, by weight (dry basis);
- (2) Meet an average emission rate of equal to or less than 0.33 pounds SO2 per MMBtu for each calendar quarter for an affected unit at a premises;
- (3) Meet an average emission rate of equal to or less than 0.3 pounds SO2 per MMBtu calculated for each calendar quarter, if such owner or operator averages the emissions from two or more affected units at a premises; or
- (4) Meet an average emission rate equal to or less than 0.3 pounds SO2 per MMBtu calculated for each calendar quarter in accordance with the provisions of subsection (h) of this section, provided that each affected unit or units:
 - (A) Combusts liquid fuel, gaseous fuel or a combination of each, provided that each fuel possess a fuel sulfur limit of equal to or less than 0.5 % sulfur, by weight (dry basis), or
 - (B) Meets an actual quarterly average emission rate that does not exceed 0.55 pounds SO2 per MMBtu.

(f) Compliance extension for sulfur dioxide emission standards and fuel sulfur limits.

- (1) The commissioner may authorize an extension, to expire no later than June 1, 2003, to comply with the requirements of subsection (c) or (e) of this section upon the request of an owner or operator of an affected unit provided such request is filed with the commissioner no later than 120 days before the applicable compliance date of subsection (c) or (e) of this section.
- (2) Before granting or denying a request for an extension pursuant to subdivision (1) of this subsection, the commissioner shall make a finding, after consultation with the Department of Public Utility Control, to determine whether the provisions of this section will substantially

impact the reliable generation or delivery of electricity to residential, commercial and industrial users in the state. The commissioner may hold a public hearing prior to granting or denying such request for an extension.

- (3) The commissioner may impose conditions and limitations by permit or order when granting a request for an extension under subdivision (1) of this subsection.
- (4) Any extension authorized under subdivision (1) of this subsection shall require that the owner or operator of an affected unit, through a permit or order, comply with the requirements of subsection (c) or (e) of this subsection by reconstructing the existing affected unit, replacing the existing affected unit with a new source, or submitting to an emissions cap. The commissioner may require such emissions cap be equivalent to, or less than, the quantity of emissions that would have been emitted had the source complied with the requirements of subsection (c) or (e). Any emissions cap shall expire no later than June 1, 2003 and any reconstruction or replacement shall be completed no later than June 1, 2003.
- (5) The extension provided by this subsection shall not relieve the owner or operator of an affected source of the requirements to comply with any applicable provision of this section, including subsection (d) of this section.

(g) Fuel Emergencies.

- (1) The commissioner may suspend the requirements of subsection (c) or (e) of this section for the owner or operator of any affected unit using a low-sulfur fuel. For the purposes of this subsection, a low-sulfur fuel is any solid, liquid or gaseous fuel with a sulfur content equal to or less than 0.5% by weight, dry basis. Such suspension shall be made only when the commissioner finds that the availability of fuel that complies with such requirements is inadequate to meet the needs of residential, commercial and industrial users in this state and that such inadequate supply constitutes an emergency.
- (2) The commissioner shall specify in writing the period of time for which the suspension described in subdivision (1) of this subsection shall be in effect.
- (3) No later than thirty days after the termination of any suspension of fuel sulfur limits made pursuant to this subsection, the owner or operator of an affected unit or units shall report to the commissioner in writing the amount of SO2 emissions in excess of those that would have occurred had the use of compliant fuel at the affected source not been interrupted. If such excess SO2 emissions from any premises exceed fifty tons, the commissioner may require that the owner or operator of such affected unit or units offset such SO2 emissions through the use of emission reduction trading in accordance with the provisions of subsection (h) of this section.

(h) Emissions reduction trading.

(1) The owner or operator of an affected unit may use SO2 DERCs or SO2 allowances to comply with the applicable emission limitations set forth in subsection (e)(4) of this section pursuant to a permit or order issued by the commissioner.

- (2) Such owner or operator shall retire one (1) SO2 DERC for each ton or part thereof of SO2 emitted in excess of the applicable emission limitation in subsection (e)(4) of this section. In the alternative, an owner or operator may retire four (4) SO2 allowances for each ton or part thereof of SO2 emitted in excess of the applicable emission limitation in subsection (e)(4) of this section.
- (3) Any creation or use of SO2 DERCs for the purpose of this subsection shall be consistent with the provisions of 40 CFR 51, Subpart U and the U.S. Environmental Protection Agency's "Emission Trading Policy Statement," published December 4, 1986 (Federal Register, Volume 51, page 43814).
- (4) The owner or operator of any affected facility using SO2 allowances as a means of compliance with the provisions of this subsection and subsection (e)(4) of this section shall ensure that such allowances were originally issued by the Administrator to a Title IV source located in the state of Connecticut or in any affected state.
- (5) The owner or operator of any affected unit that reduces SO₂ emissions for the purpose of generating early reduction credits or SO₂ DERCs may request that the commissioner approve such early reduction credits or SO₂ DERCS in writing by permit or order provided that such reductions are:
 - (A) Real, quantifiable, surplus, permanent and enforceable; and
 - (B) Based on an emissions rate that is the most stringent of:
 - (i) 0.3 pounds SO₂ per MMBtu,
 - (ii) Permitted allowable emissions of the affected unit, or
 - (i) The actual emissions of the affected unit.

(i) Record keeping.

- (1) The owner or operator of an affected unit who demonstrates compliance with this section by meeting the applicable fuel sulfur limits of subsections (c)(1) or (e)(1) of this section shall make and keep records in accordance with the following:
 - (A) If fuel with sulfur content not exceeding an applicable fuel sulfur limit is the only fuel purchased and combusted by an affected unit, then the owner or operator shall make and keep records that demonstrate the fuel sulfur content of each shipment of fuel received; or
 - (B) If fuel with sulfur content above any applicable limit is blended at the premises for combustion in an affected unit or units, the owner or operator shall make and keep daily records demonstrating that all fuel combusted at the affected unit or

units meets the applicable fuel sulfur limits of subsection (c)(1) or (e)(1) of this section. Fuel sulfur analysis shall be conducted in accordance with the American Society for Testing and Material (ASTM) test method D4294 and automatic sampling equipment shall conform to ASTM test method D4177-82. (Copies of ASTM test methods D4294 and D4177-82 may be obtained from the Department of Environmental Protection, Bureau of Air Management, 79 Elm Street, 5th floor, Hartford, CT 06106-5127; (860) 424-3027).

- (2) The owner or operator of an affected unit who demonstrates compliance with this section by meeting the average SO2 emission rate limits of subsections (c)(2), (c)(3), (e)(2), (e)(3) or (e)(4) of this section shall make and keep records in accordance with the following:
 - (A) For affected units that are also Title IV sources, hourly SO2 emission rate values determined from data measured by a CEMS in accordance with the applicable provisions of 40 CFR 75;
 - (B) For affected units that are not Title IV sources:
 - (i) hourly SO2 emission rate values determined from data measured by a CEMS in accordance with the applicable provisions of either 40 CFR Parts 60 or 75, or
 - (ii) if any affected unit does not have a CEMS in accordance with either 40 CFR Parts 60 or 75, then hourly SO2 emission rate values determined from data measured by a CEMS or other monitoring system; and
 - (C) For all affected units, quarterly facility SO2 emission rate averages, determined by dividing total quarterly SO2 emissions by total quarterly heat input values for all affected units at the facility.
- (3) The owner or operator of an affected unit shall keep the records specified in subdivision (1) or (2) of this subsection at the premises for a period of five years. Such records need not be maintained for distillate oil, motor vehicle fuel, aircraft fuel, or gaseous fuel, provided such fuels have a sulfur content below 0.3% by weight (dry basis) and are the only fuels combusted at the affected unit. This exemption shall not apply when such fuels are combusted in combination with other fuels having sulfur contents above 0.3% by weight (dry basis).

(j) Reporting requirements.

(1) The owner or operator of an affected unit for which the commissioner has issued a final Title V permit shall, as part of any compliance certification pursuant to section 22a-174-33(q)(2) of the Regulations of Connecticut State Agencies, certify in writing to the commissioner compliance with the applicable provisions of this section. Such certification shall include actual quarterly SO2 emissions in tons and either average quarterly fuel sulfur content or average quarterly emission rate, whichever is applicable, for each affected unit.

(2) The owner or operator of an affected unit for which the commissioner has not issued a final Title V permit shall certify in writing to the commissioner that such owner or operator is in compliance with the applicable provisions of this section on or before March 1 of each year for the previous calendar year. Such certification shall include actual quarterly SO2 emissions in tons and either average quarterly fuel sulfur content or average quarterly emission rate, whichever is applicable, for each affected unit.

(k) Duty to comply with the most stringent standards applicable to the affected units.

- (1) Notwithstanding any provision of this section to the contrary, if the owner or operator of an affected unit is subject to a more stringent emission standard or limitation imposed by order, permit or other applicable law, such owner or operator shall comply with the most stringent emission limitation or standard.
- (2) Notwithstanding any provision of this section to the contrary, if the owner or operator of an affected unit is subject to additional monitoring or reporting requirements imposed by order, permit or other applicable law, such owner or operator shall comply with the additional monitoring or reporting requirements.